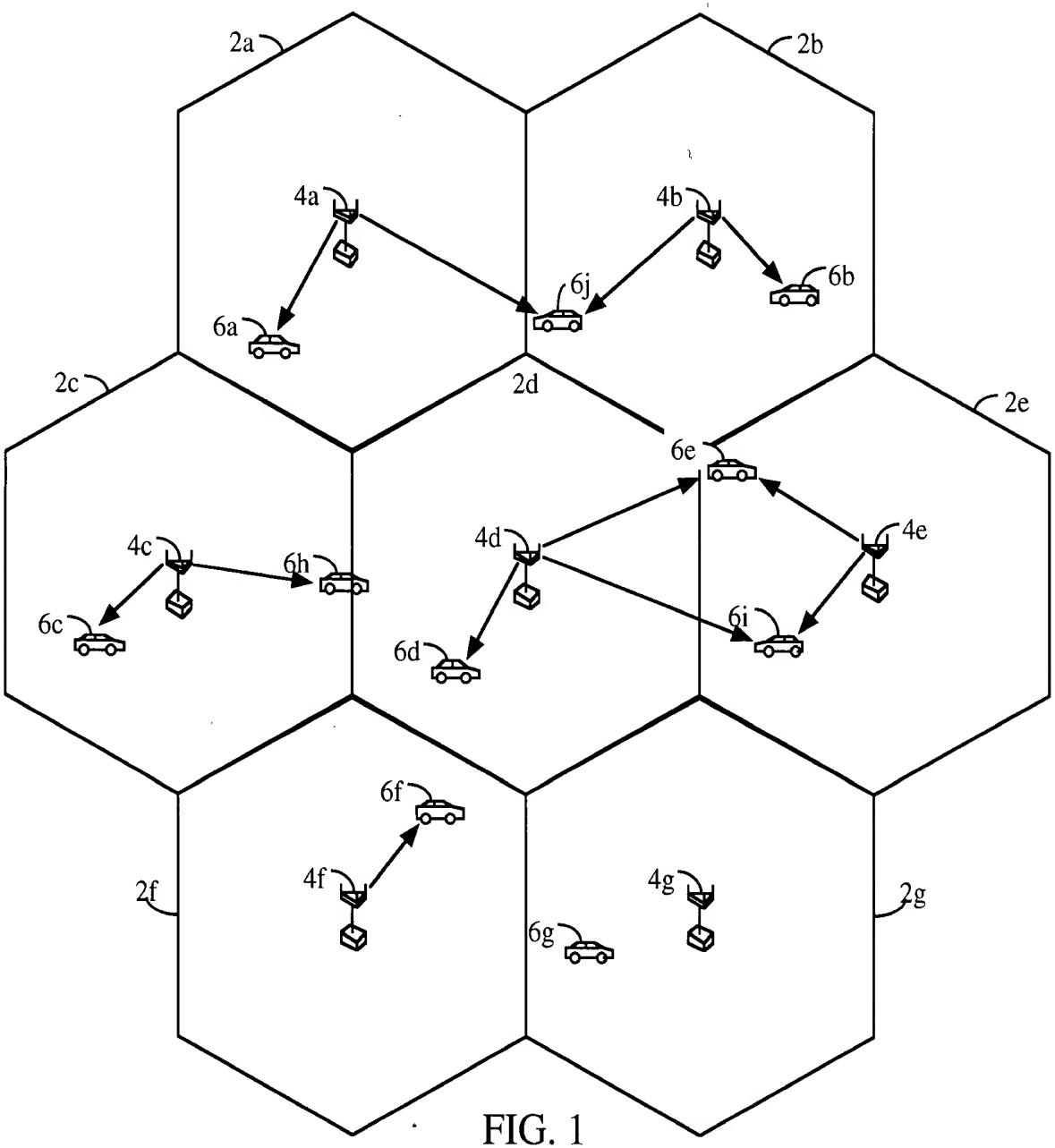

FIG. 1

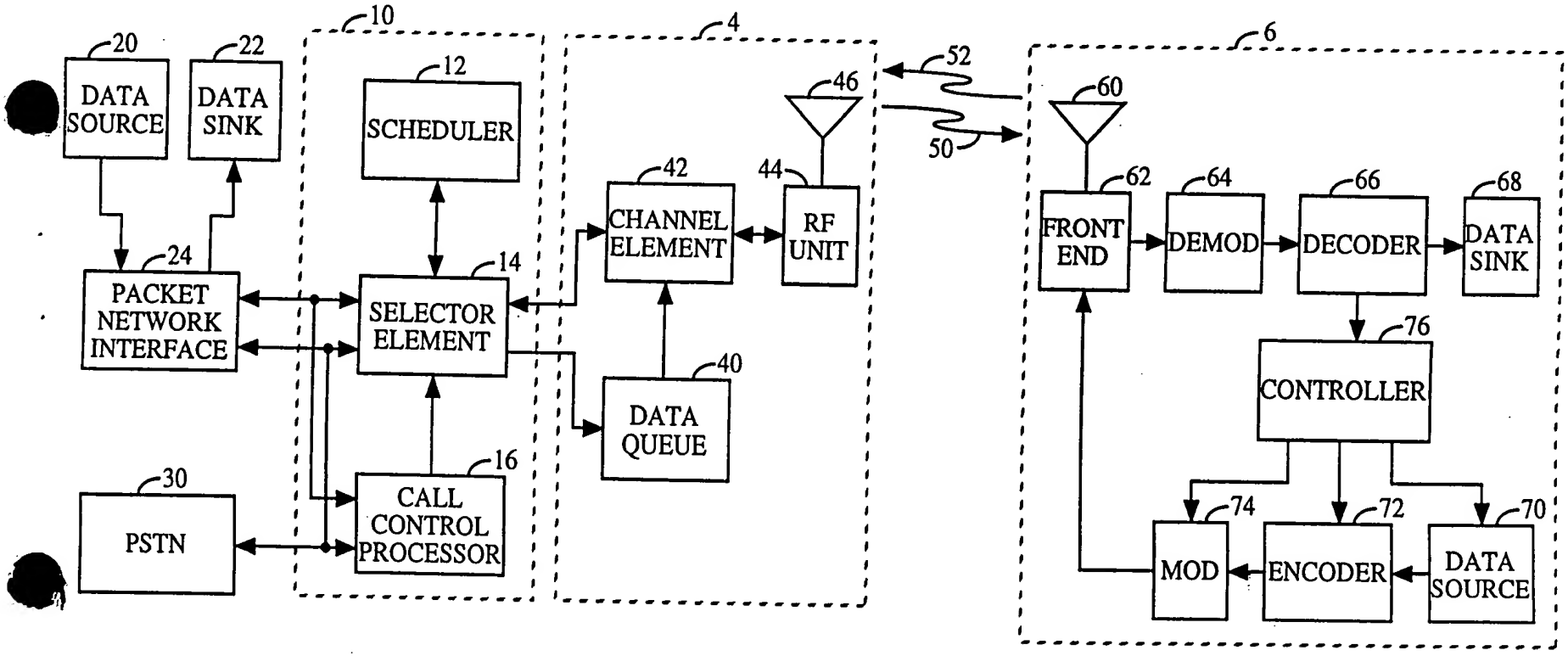
10
4
6
20
DATA SOURCE
22
DATA SINK
12
SCHEDULER
46
52
50
60
42
44
CHANNEL ELEMENT
RF UNIT
62
FRONT END
64
DEMOD
66
DECODER
68
DATA SINK
24
PACKET NETWORK INTERFACE
14
SELECTOR ELEMENT
40
DATA QUEUE
76
CONTROLLER
30
PSTN
16
CALL CONTROL PROCESSOR
74
MOD
72
ENCODER
70
DATA SOURCE

FIG. 2

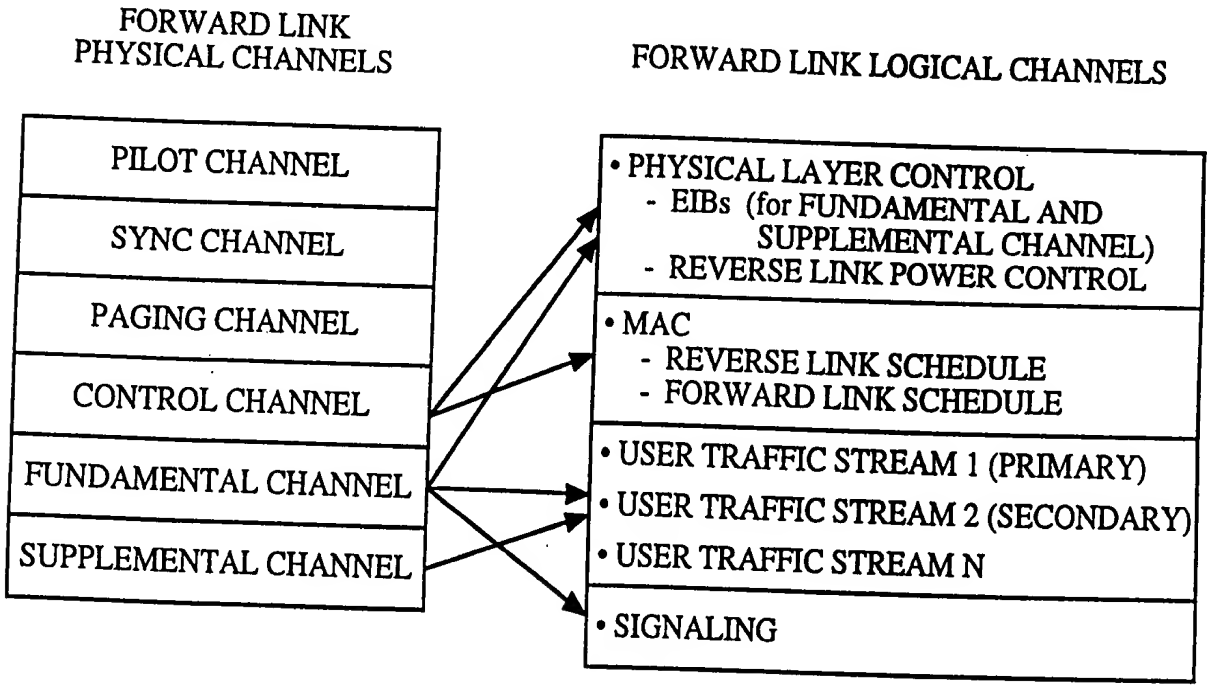
FORWARD LINK
PHYSICAL CHANNELS
FORWARD LINK LOGICAL CHANNELS
PILOT CHANNEL
SYNC CHANNEL
PAGING CHANNEL
CONTROL CHANNEL
FUNDAMENTAL CHANNEL
SUPPLEMENTAL CHANNEL
• PHYSICAL LAYER CONTROL
- EIBs (for FUNDAMENTAL AND SUPPLEMENTAL CHANNEL)
- REVERSE LINK POWER CONTROL
• MAC
- REVERSE LINK SCHEDULE
- FORWARD LINK SCHEDULE
• USER TRAFFIC STREAM 1 (PRIMARY)
• USER TRAFFIC STREAM 2 (SECONDARY)
• USER TRAFFIC STREAM N
• SIGNALING

FIG. 3

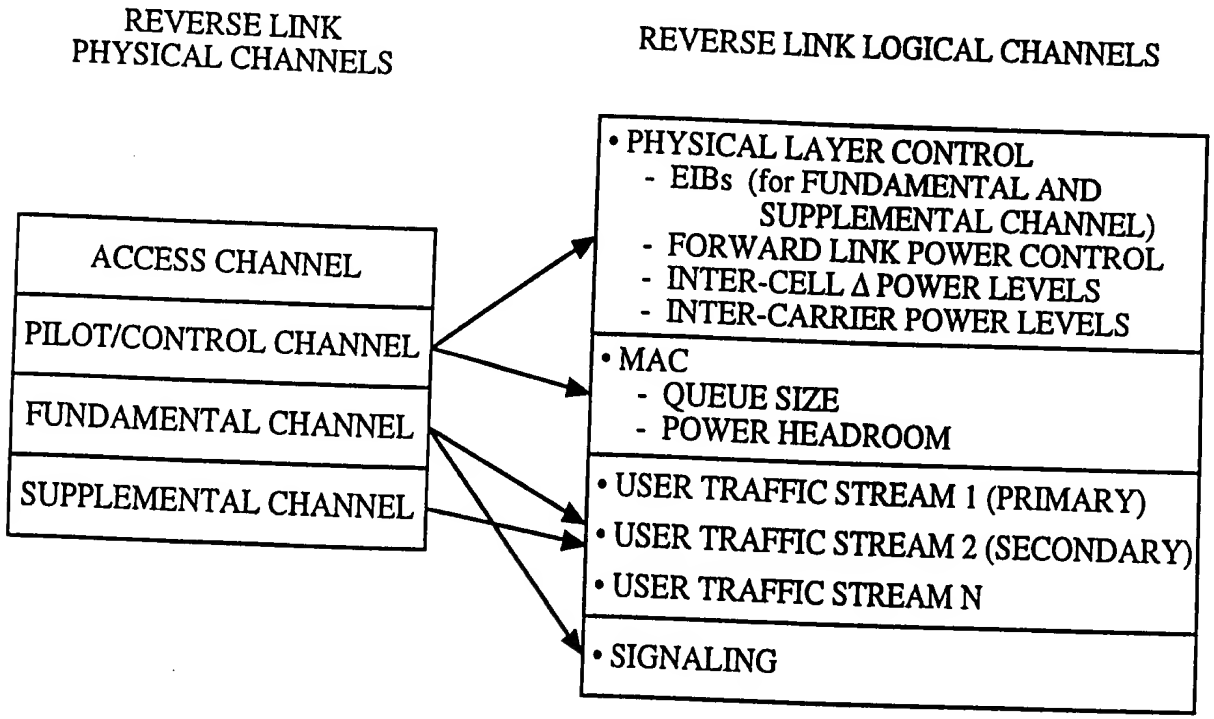
REVERSE LINK
PHYSICAL CHANNELS
REVERSE LINK LOGICAL CHANNELS
ACCESS CHANNEL
PILOT/CONTROL CHANNEL
FUNDAMENTAL CHANNEL
SUPPLEMENTAL CHANNEL
• PHYSICAL LAYER CONTROL
- EIBs (for FUNDAMENTAL AND SUPPLEMENTAL CHANNEL)
- FORWARD LINK POWER CONTROL
- INTER-CELL Δ POWER LEVELS
- INTER-CARRIER POWER LEVELS
• MAC
- QUEUE SIZE
- POWER HEADROOM
• USER TRAFFIC STREAM 1 (PRIMARY)
• USER TRAFFIC STREAM 2 (SECONDARY)
• USER TRAFFIC STREAM N
• SIGNALING

FIG. 4

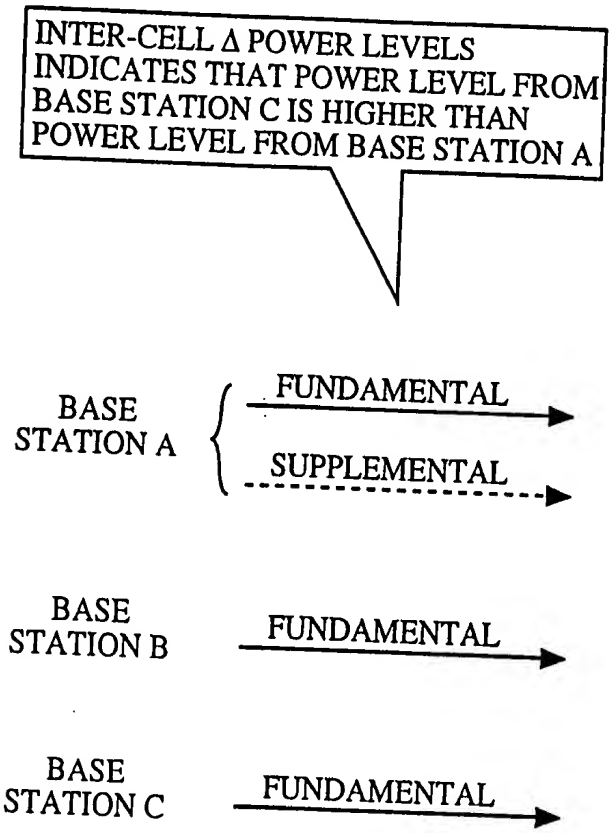
INTER-CELL Δ POWER LEVELS INDICATES THAT POWER LEVEL FROM BASE STATION C IS HIGHER THAN POWER LEVEL FROM BASE STATION A
BASE STATION A
FUNDAMENTAL
SUPPLEMENTAL
BASE STATION B
FUNDAMENTAL
BASE STATION C
FUNDAMENTAL

FIG. 5A

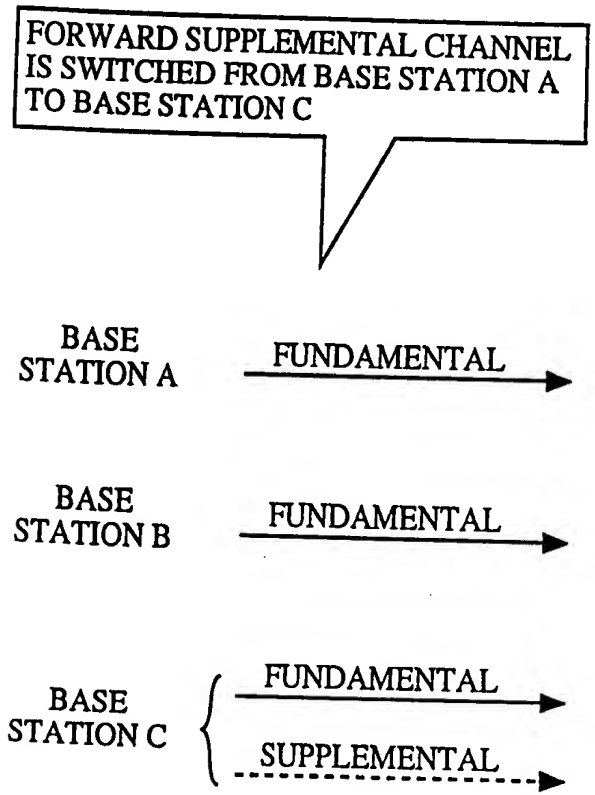
FORWARD SUPPLEMENTAL CHANNEL IS SWITCHED FROM BASE STATION A TO BASE STATION C
BASE STATION A
FUNDAMENTAL
BASE STATION B
FUNDAMENTAL
BASE STATION C
FUNDAMENTAL
SUPPLEMENTAL

FIG. 5B

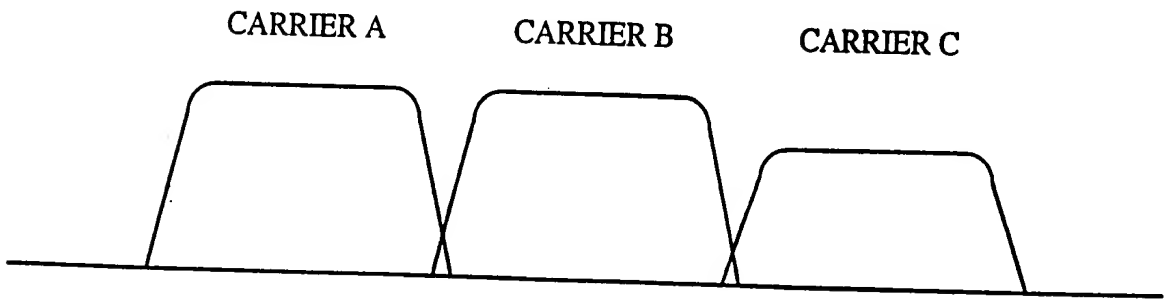

FIG. 6

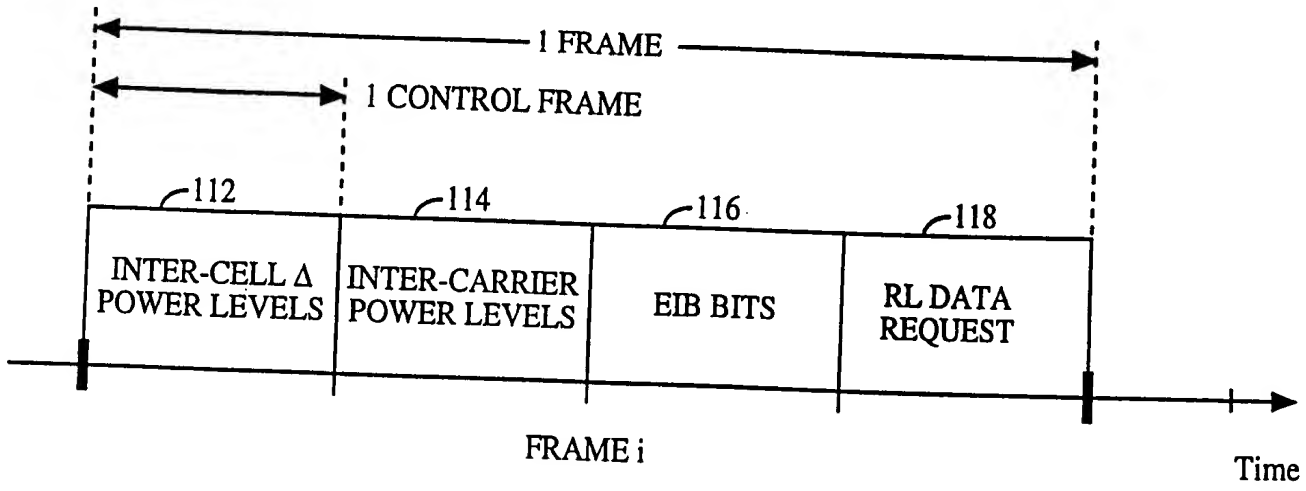
1 FRAME
1 CONTROL FRAME
112
114
116
118
INTER-CELL Δ POWER LEVELS
INTER-CARRIER POWER LEVELS
EIB BITS
RL DATA REQUEST
FRAME i
Time

FIG. 7A

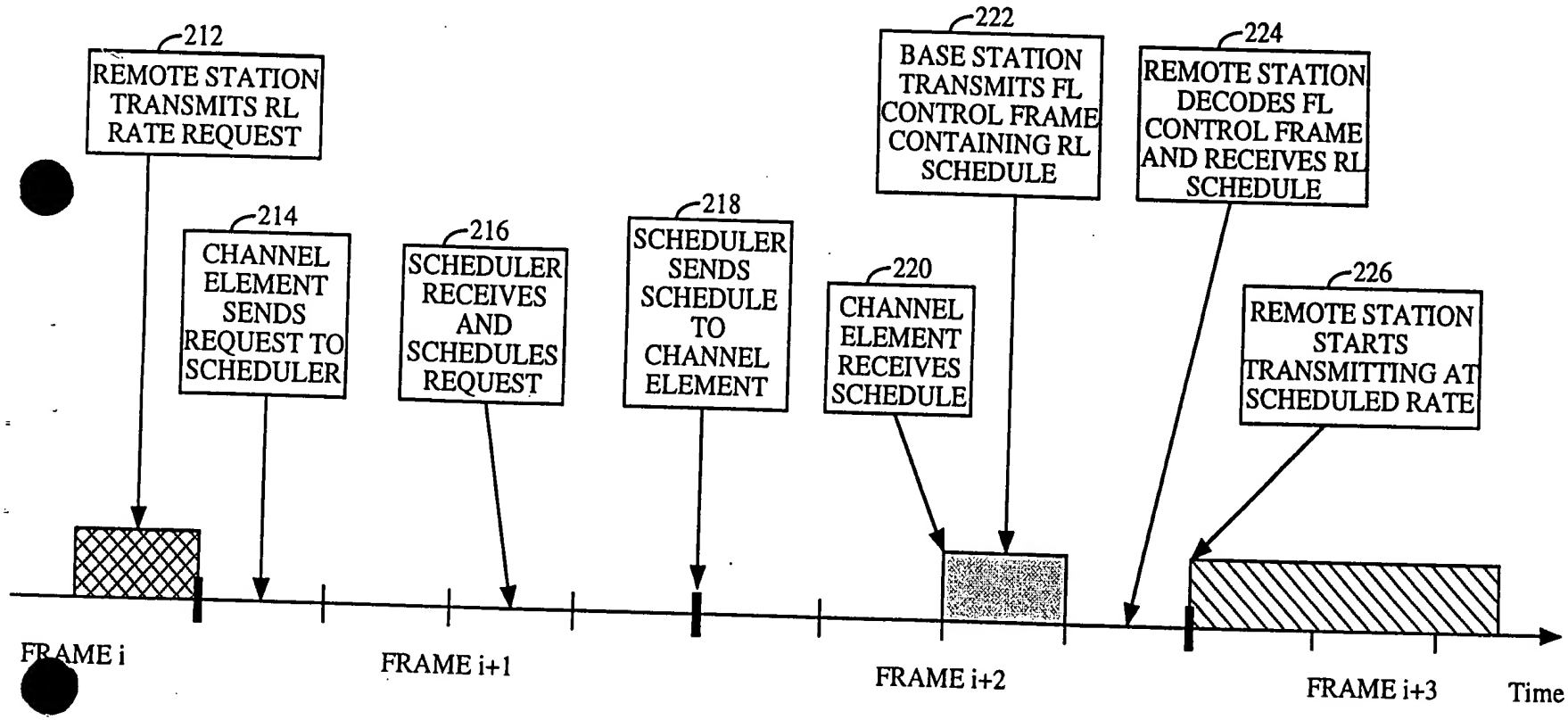
212
REMOTE STATION TRANSMITS RL RATE REQUEST
214
CHANNEL ELEMENT SENDS REQUEST TO SCHEDULER
216
SCHEDULER RECEIVES AND SCHEDULES REQUEST
218
SCHEDULER SENDS SCHEDULE TO CHANNEL ELEMENT
220
CHANNEL ELEMENT RECEIVES SCHEDULE
222
BASE STATION TRANSMITS FL CONTROL FRAME CONTAINING RL SCHEDULE
224
REMOTE STATION DECODES FL CONTROL FRAME AND RECEIVES RL SCHEDULE
226
REMOTE STATION STARTS TRANSMITTING AT SCHEDULED RATE
FRAME i
FRAME i+1
FRAME i+2
FRAME i+3
Time

FIG. 7B

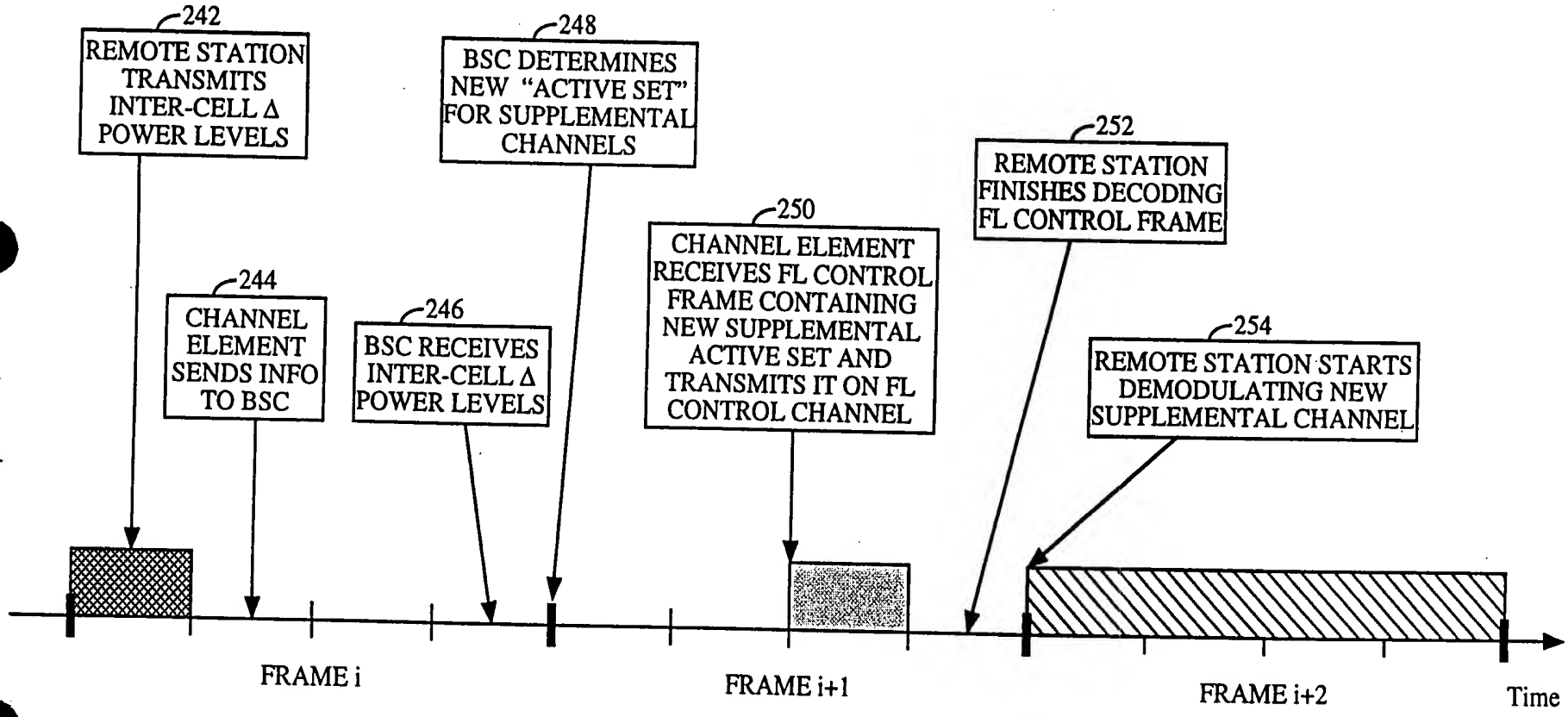
242
REMOTE STATION TRANSMITS INTER-CELL Δ POWER LEVELS
244
CHANNEL ELEMENT SENDS INFO TO BSC
246
BSC RECEIVES INTER-CELL Δ POWER LEVELS
248
BSC DETERMINES NEW "ACTIVE SET" FOR SUPPLEMENTAL CHANNELS
250
CHANNEL ELEMENT RECEIVES FL CONTROL FRAME CONTAINING NEW SUPPLEMENTAL ACTIVE SET AND TRANSMITS IT ON FL CONTROL CHANNEL
252
REMOTE STATION FINISHES DECODING FL CONTROL FRAME
254
REMOTE STATION STARTS DEMODULATING NEW SUPPLEMENTAL CHANNEL
FRAME i
FRAME i+1
FRAME i+2
Time

FIG. 7C

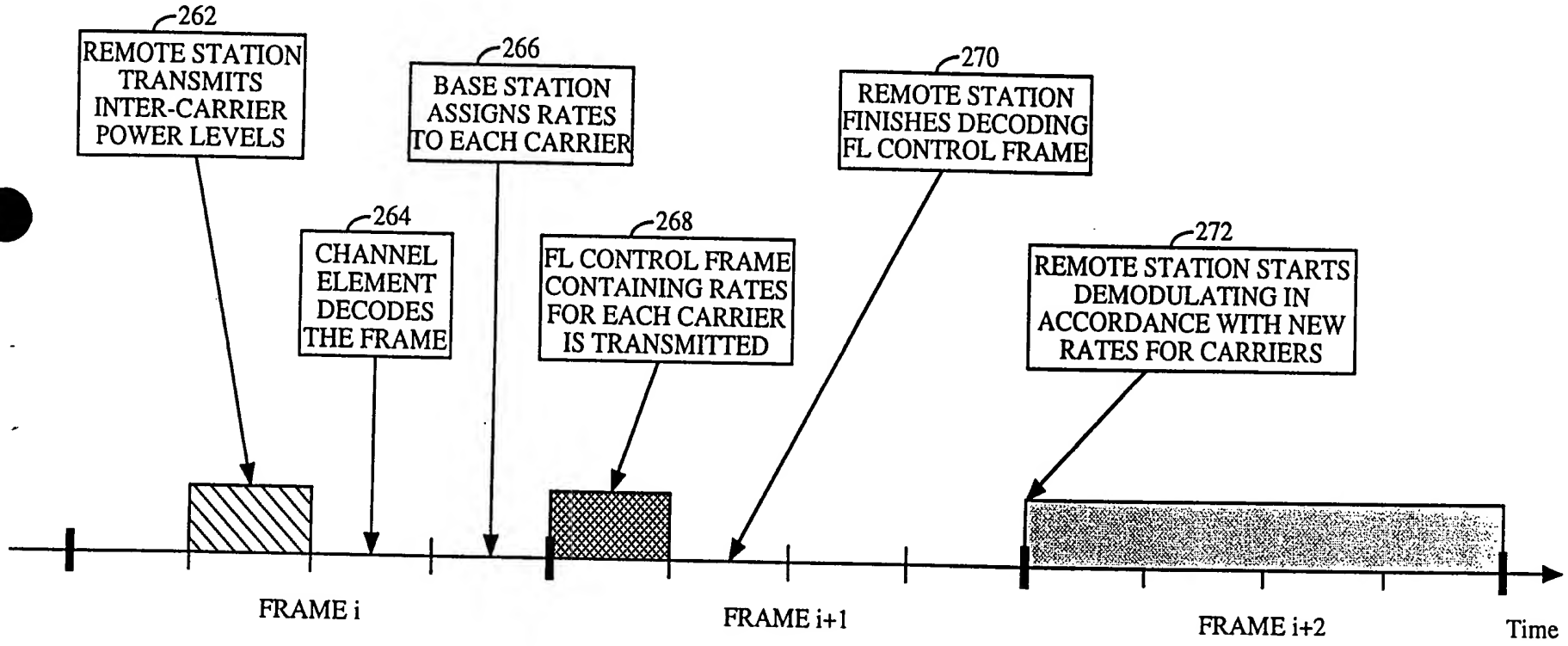
262
REMOTE STATION TRANSMITS INTER-CARRIER POWER LEVELS
266
BASE STATION ASSIGNS RATES TO EACH CARRIER
270
REMOTE STATION FINISHES DECODING FL CONTROL FRAME
264
CHANNEL ELEMENT DECODES THE FRAME
268
FL CONTROL FRAME CONTAINING RATES FOR EACH CARRIER IS TRANSMITTED
272
REMOTE STATION STARTS DEMODULATING IN ACCORDANCE WITH NEW RATES FOR CARRIERS
FRAME i
FRAME i+1
FRAME i+2
Time

FIG. 7D

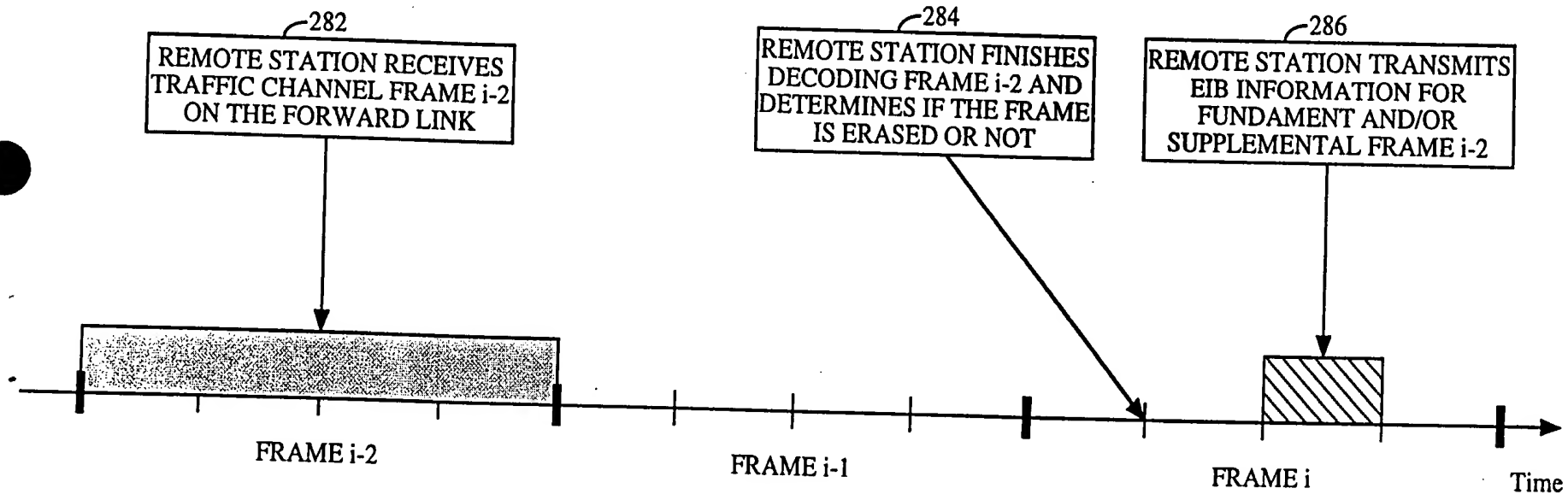
282
REMOTE STATION RECEIVES TRAFFIC CHANNEL FRAME i-2 ON THE FORWARD LINK
284
REMOTE STATION FINISHES DECODING FRAME i-2 AND DETERMINES IF THE FRAME IS ERASED OR NOT
286
REMOTE STATION TRANSMITS EIB INFORMATION FOR FUNDAMENT AND/OR SUPPLEMENTAL FRAME i-2
FRAME i-2
FRAME i-1
FRAME i
Time

FIG. 7E

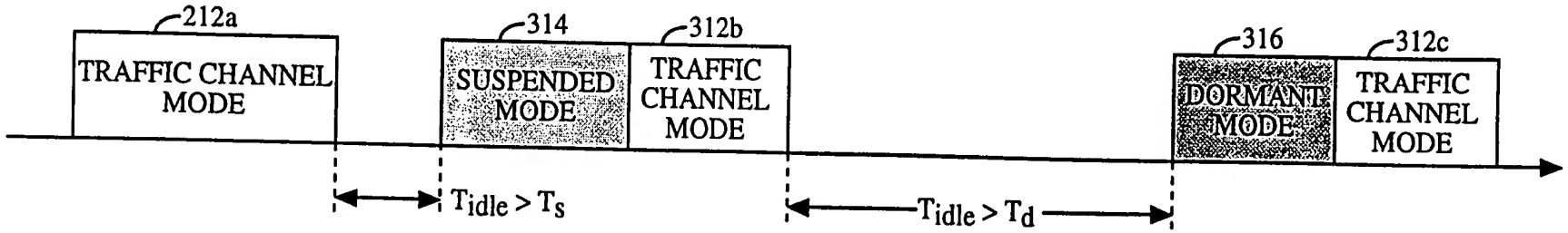
212a
TRAFFIC CHANNEL MODE
314
SUSPENDED MODE
312b
TRAFFIC CHANNEL MODE
316
DORMANT MODE
312c
TRAFFIC CHANNEL MODE
Tidle > Ts
Tidle > Td

FIG. 8A

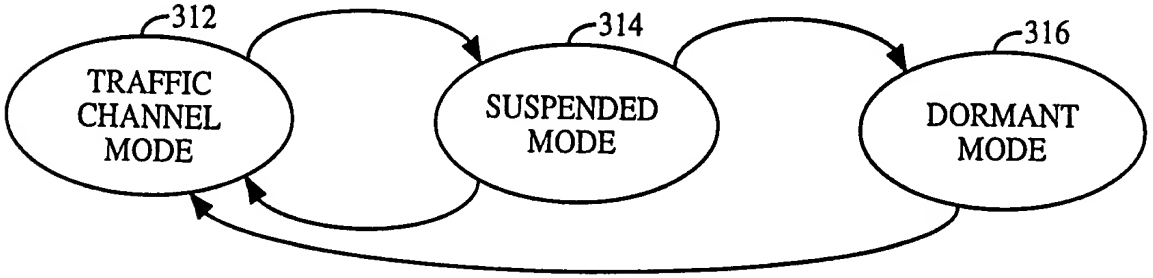
312
TRAFFIC CHANNEL MODE
314
SUSPENDED MODE
316
DORMANT MODE

FIG. 8B

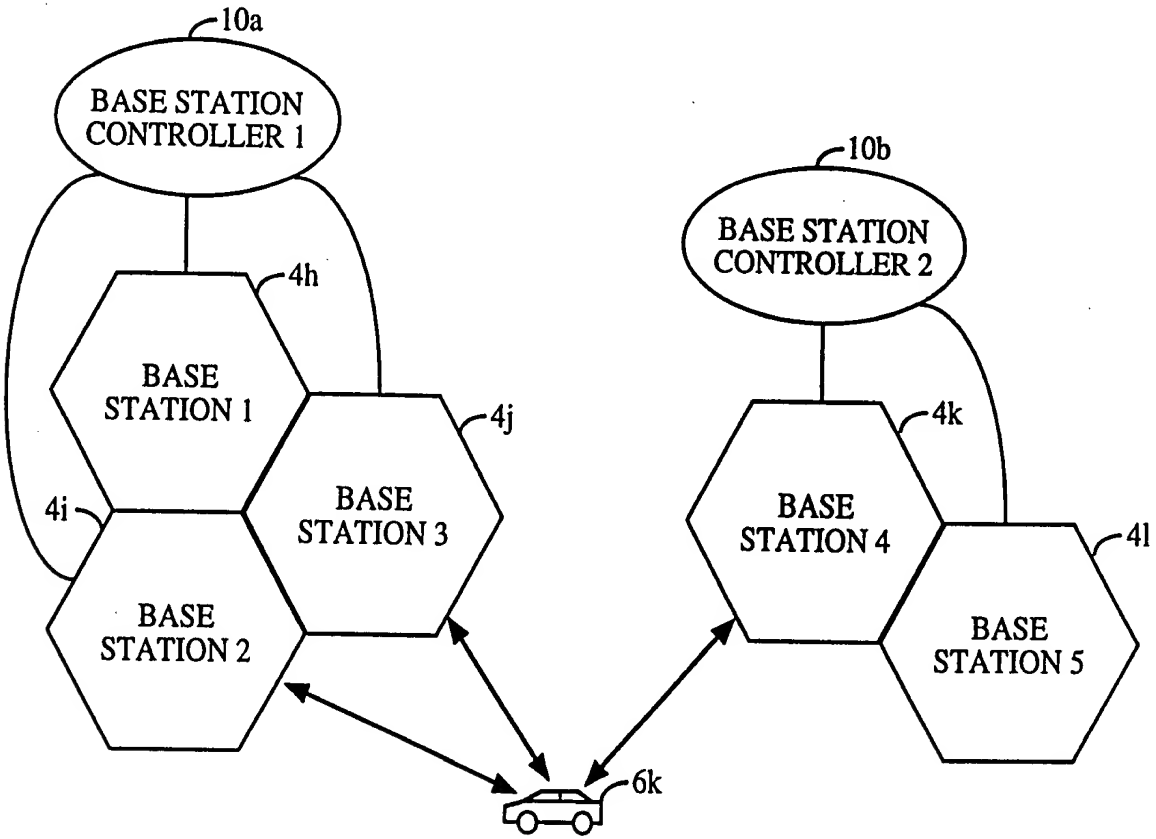
10a
BASE STATION CONTROLLER 1
10b
BASE STATION CONTROLLER 2
4h
BASE STATION 1
4j
BASE STATION 3
4i
BASE STATION 2
4k
BASE STATION 4
4l
BASE STATION 5
6k

FIG. 8C

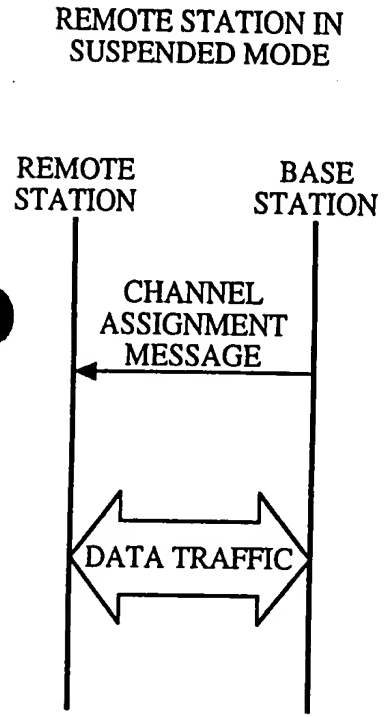

FIG. 9A

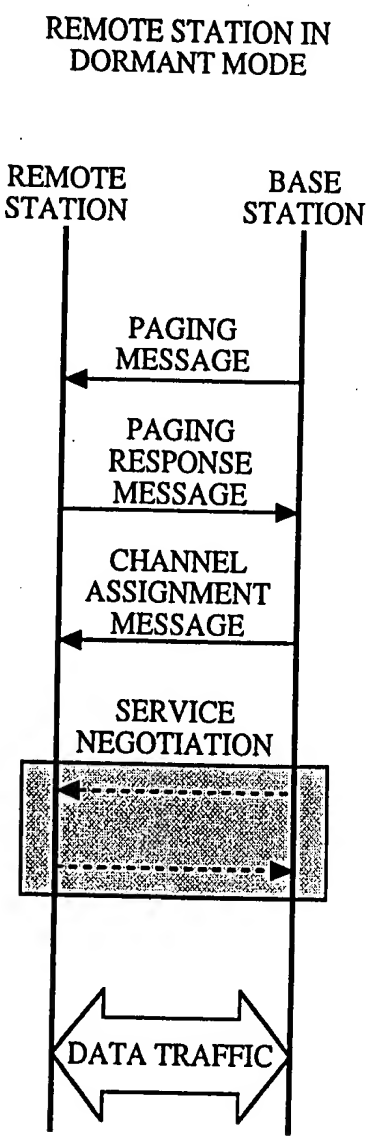

FIG. 9B

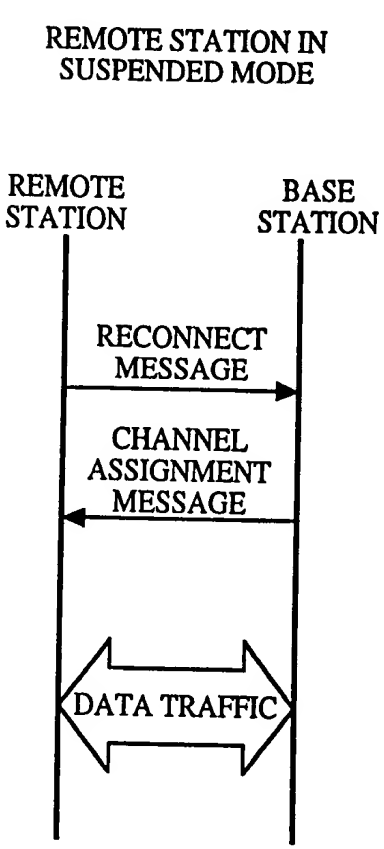

FIG. 9C

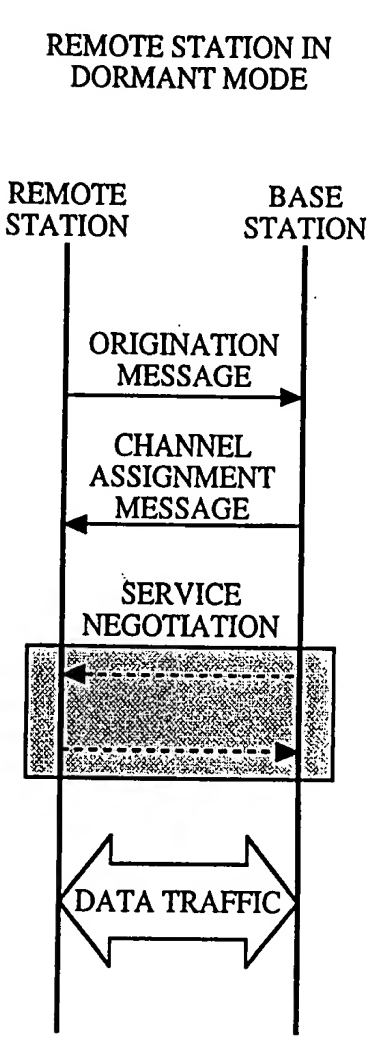

FIG. 9D